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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
I0/691,297	10/22/2003	Geary G. Parke	107725/00006	2242

7590 05/17/2006

Miller, Canfield, Paddock and Stone P.L.C.  
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150 West Jefferson Ave.  
Detroit, MI 48226

EXAMINER
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CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/691,297

Applicant(s)

PARKE, GEARY G.

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 10-12 is/are allowed.
- 6) ☒ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo (U.S. Patent No. 3,985,648) in view of Hong (U.S. Patent No. 5,665,240). Casolo discloses an apparatus comprising an inlet connected to a metals trap (24, 28, 32, 36, 40 and/or 44), and a second trap (20) positioned between the inlet and the metals trap, which second trap filters organic materials from wastewater. Accordingly, this primary reference discloses the claimed invention with the exception of the recited phosphate material, and its particle size. Hong discloses removing contaminants from water with calcium phosphate (see col. 3, line 17); and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of Casolo with a calcium phosphate treatment unit, as suggested by Hong, in order to provide additional contaminant removal capability for this primary reference system. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ phosphate particles having the recited size in the system of the thus modified primary reference, since Hong suggests utilizing large particles in commercial applications (see col. 8, lines 14-18).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo and Hong as applied above, and further in view of Jensen et al. (U.S. Patent No. 6,706,195). The modified primary reference discloses the claimed invention with the

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exception of the recited plumbing arrangement. Jensen et al. discloses a water purification system, and teaches utilizing a plurality of chambers having inlet and outlet valves controlled by a controller (see col. 4, lines 41-45). This reference further teaches the use of diagnostic devices (col. 4, line 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the modified primary reference with the plumbing arrangement of Jensen et al., in order to obtain the advantages disclosed by this reference for the system of the modified primary reference.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo and Hong as applied above, and further in view of Faylor et al. (U.S. Patent No. 3,870,033). The modified primary reference discloses the claimed invention with the exception of the recited oxidizer. Faylor et al. discloses purifying water with a series of treatments including oxidation (see col. 5, line 61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the modified primary reference with the oxidizer unit of Faylor et al., in order to provide additional purification of the liquid undergoing treatment in this modified primary reference system.

Claims 1-6 and 10-12 are allowed because the references of record do not teach or fairly suggest an adsorption apparatus of the type recited wherein the second trap contains fish bone char.

Applicant's arguments filed March 2, 2006 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues, with

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respect to claim 7, that Hong teaches the use of fine powders which would be rapidly consumed in an industrial waste water treatment system. It is pointed out, however, that Hong clearly teaches that for commercial applications, large particle size materials are preferred (see col. 8, lines 14-18). Accordingly, it would have been obvious to one of ordinary skill in the liquid purification art to employ phosphate particles having the large particle size recited in claim 7 in the industrial system of the primary reference, since this secondary reference clearly suggests this modification.

With respect to claims 8 and 9, Applicant's arguments have been noted and carefully considered, but no longer appear to be relevant in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
May 15, 2006